Harvesting and Transportation: Essentials for Georgia's Forest Economy

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Wood Supply Chain: The Essentials

- Landowners actively managing forests
- Profitable loggers
- Efficient timber transportation
- Markets for timber

Customers for wood and paper products





Average Georgia Logging Business

- Employs 10.6 people
 - 19% are relatives of the owner
- Average wage: \$34,940 per yr.
- Harvest 1,617 tons (65 truckloads) per week

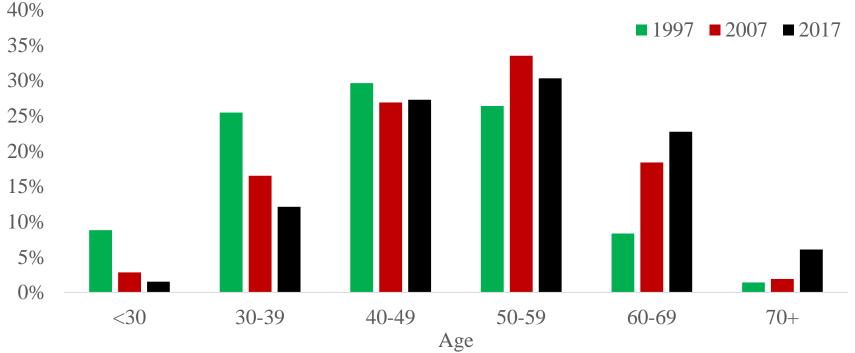
\$1.2 million investment





Logging Business Owner Ages 1997-2017

- Median owner age: 53 yrs
 - 1/3 of owners 60+ yrs old





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Logging Business Challenges

- 1. Trucking/insurance (43%)
 - Truck driver shortage
 - Increasing insurance rates

2. Quotas/inadequate markets (40%)

3. Workers (15%)

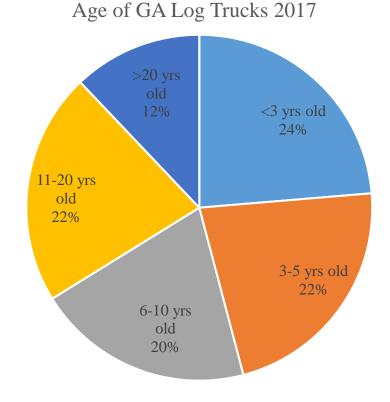




Timber Transportation Infrastructure

- Median fleet size
 - GA log trucks = 4 trucks
 - Other industries = 76 trucks

- Average truck age
 - GA log trucks = 9.5 yr
 - Other trucks = 5.5 yr





Driver Shortage

- Nationwide driver shortage
- Log truck driver requirements
 - 25+ years old
 - 2-3 years of log truck driving experience



USDA Forest Service Southern Research Station, Bugwood.org

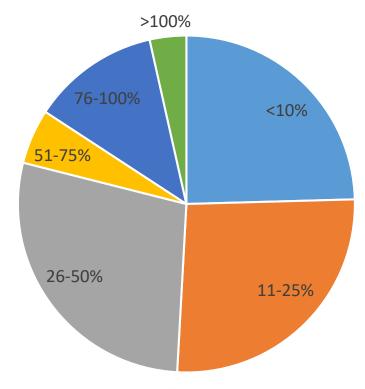
 Aging log truck drivers, inability to recruit new ones



Insurance Cost Increases

- 50% increase in average liability insurance premium cost since 2012
- Greater variability between companies
 - Premium range 2012 = 1 ,500- 4 ,000
 - Premium range 2017 = 5 3,000- 5 13,000+
- Average Georgia log truck premium
 - 15% higher than Alabama
 - 94% higher than North Carolina

Log Truck Insurance Rate Increases
GA Loggers 2012-2017





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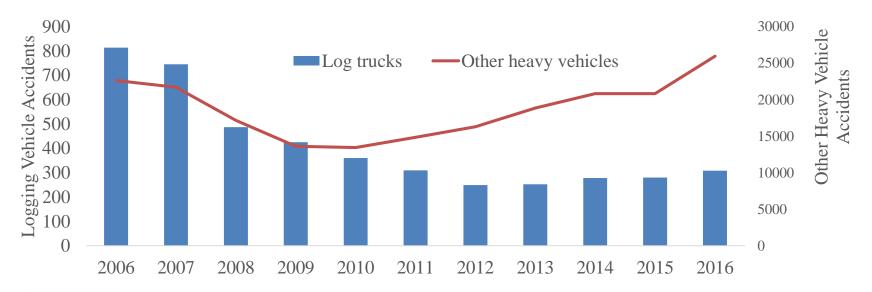
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Sources:

Conrad, J. 2017. Log truck liability insurance in Georgia: costs, trends, and solutions. Georgia Forestry Association Center for Forest Policy Studies. Forsyth, GA. 49 p.

Log Truck Accidents

- Accidents down 69% 2006-2012
- Accidents up 24% 2012-2016

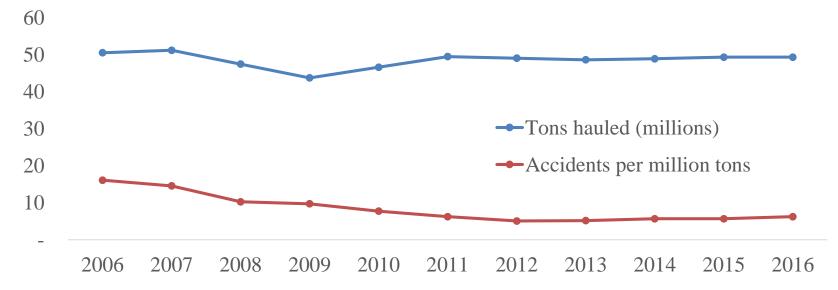




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Log Truck Accident Rate

- 16 accidents per million tons hauled in 2006
- 6.3 accidents per million tons hauled in 2016

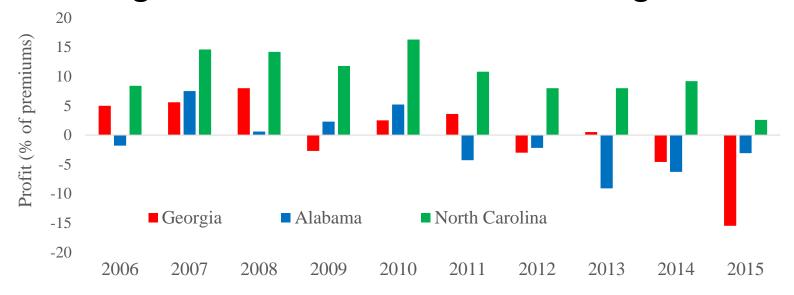




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Reasons for Insurance Rate Increases

- Losses in commercial auto insurance
 - Nationwide, an unprofitable segment since 2011
- Loss of log truck insurance carriers in Georgia



Profits on commercial auto policies 2006-2015.



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Sources: A.M. Best (2017), NAIC (2017)

Reasons for Insurance Rate Increases

- Increases in costs per claim Why?
- Litigation
 - Settlements
 - Legal defense costs
 - Losses in court
- 2. Increased cost of medical care
- 3. Increased cost of vehicle repairs
- 4. Cell phone use by automobile drivers



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Reasons for Differences Between States

- North Carolina Reinsurance Facility
- Mill locations
 - Large GA mills: Augusta, Macon, Savannah, etc.
 - Large NC mills: New Bern, Plymouth, Riegelwood
- 3. Other
 - Regulatory environment
 - Number of insurance carriers
 - Claims history
 - Social factors



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Reasons for Differences Between Individual Businesses

- 1. Claims history
- 2. Drivers
 - 25+ years old
 - 2-3 years experience <u>driving a log truck</u>
- 3. Compliance, Safety, Accountability (CSA) program
 - Federal Motor Carrier Safety Administration



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Report			Vehicle			
Inspection Date	Number	State	Plate Number	Plate State	Туре	
6/19/2017		GA		GA	Straight Truck	
5/16/2017		GA		GA	Truck Tractor	
/iolation: 393.9 Ino	perable Required Lamp					
3/29/2017		GA		GA	Straight Truck	
3/16/2017		GA		GA	Straight Truck	
1/13/2017		GA		GA	Truck Tractor	
11/28/2016		GA		GA	Truck Tractor	

Safety Rating & OOS Rates

(As of 10/09/2017 updated daily from SAFER)

Not Rated

Out of Service Rates

Type	00S %	National Avg %	
Vehicle	18.2	20.7	
Driver	0.0	5.5	
Hazmat		4.5	

Violation: 393.78 Windshield wipers inoperative/defective
Violation: 393.82 Speedometer inoperative / inadequate

Violation: 393.201(a) Frame cracked / loose / sagging / broken (OOS) Violation: 393.207(a) Axle positioning parts defective/missing (OOS)

Sum of Violation Weight => Inspection Severity Weight (SW)

11/22/2016	GA	GA	Truck Tractor
2/16/2016	GA	GA	Truck Tractor

Violation: 393.53(b) CMV manufactured after 10/19/94 has an automatic airbrake adjustment system that fails to compensate for wear

Violation: 393.47(e) Clamp or Roto type brake out-of-adjustment

Violation: 393.11LR No Lower rear retroreflective sheeting or reflex reflective materials as required for vehicles manufactured after

December 1993



Solutions

- Goal: reduce claim costs
- Reduce number of claims
- Reduce cost per claim
- > Improve transportation efficiency
 - Reduce number of trucks needed



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Legislative and Law Enforcement Solutions

- 1. Tort reform
- 2. Insurance coverage reform
- 3. Maintain or expand log truck driver training programs
- 4. Enforce laws against cell phone use while driving
- 5. Improve relations between Department of Public Safety & log truck owners



Log Truck Owner Solutions

- 1. Invest in technology
 - Drive cameras
 - GPS tracking
 - Cell phone disabling devices
- 2. Invest in driver training
- 3. Change mindset: trucking as a critical line of business
- 4. Improve log transportation efficiency
 - Increase % loaded miles
 - Reduce payload variability
 - Improve turnaround times







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Forest Products Industry/Wood Dealer Remedies

- 1. Ensure haul rates cover entire cost of safe and efficient timber transportation
- Evaluate policies for trucks delivering to mills
- Reduce truck turnaround times at mills
- 4. Avoid quota systems that incentivize unsafe driving



Summary

- Forest economy relies on logging and trucking
- Loggers are innovative, productive, produce timber at low cost
- Logging business owners, employees, truck drivers are aging
- Weakest link: timber transportation
 - Driver shortage
 - High insurance costs
 - Low weight limits = more trucks needed
- Reasons for optimism:
 - Abundant timber, strong markets, innovative loggers
 - Actionable solutions exist to solve problems



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 - Insurance industry representatives
 - Procurement foresters

